

Supplemental EPI Update, September 8, 2014

Center for Acute Disease Epidemiology (CADE)

Iowa Department of Public Health (IDPH)

Enterovirus D68 Circulating in Iowa

Enterovirus D68 has been identified through surveillance samples submitted from central Iowa. In addition, IDPH is hearing anecdotally that respiratory illnesses are occurring across Iowa, as is the case in many Midwestern states.

EV-D68 is one of over 100 different enterovirus serotypes circulating in the U.S. and around the world. An estimated 10 to 15 million infections occur in the U.S. each year, usually in summer and fall. EV-D68 infections occur less commonly than those with other enteroviruses. EV-D68, like other enteroviruses, appears to spread through close contact with infected people.

EV-D68 infection often begins with cold-like symptoms include coughing and wheezing. Most people will recover at home without complications; however, some people may develop severe respiratory illness. Infants, children, and teenagers, especially those with a history of asthma, other respiratory issues or those who have a condition that compromises their immune system, are most likely to become severely ill.

There is no vaccine to prevent EV-D68 infections and there is no specific treatment; specifically, there are no anti-viral medications currently available for this purpose. Many infections will be mild and self-limited, requiring only symptomatic treatment:

- Drink plenty of fluids.
- Rest.
- Stay home so you do not spread the virus to others.

Some people with severe respiratory illness caused by EV-D68 may need to be hospitalized and receive intensive supportive therapy.

To help reduce the risk of infection with EV-D68, healthcare professionals should recommend the following:

- Wash hands often with soap and water for 20 seconds, especially after changing diapers;
- Avoid touching eyes, nose, and mouth with unwashed hands;
- Avoid kissing, hugging, and sharing cups or eating utensils with people who are sick;
- Disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick;
- Stay home when feeling sick, and obtain consultation from your health care provider.

Enteroviruses, including EV-D68, are not reportable in Iowa or in the U.S., therefore the number of cases of the virus is not tracked. IDPH has not received requests for

assistance from Iowa healthcare facilities, nor heard that any Iowa healthcare facilities are unable to keep up with patient care demands.

Testing Information

Commercial, multi-pathogen detection systems can detect enteroviruses, and are approved by the Food and Drug Administration for use in clinical settings (Luminex xTAG RVP, BioFire FilmArray Respiratory Panel, Cepheid Xpert EV); however, these systems use broadly reactive primers that amplify RNA from either human rhinoviruses (HRVs) or enteroviruses and results are reported as "entero-rhinovirus" or "human rhinovirus/enterovirus." Most hospitals are not able to perform enterovirus typing.

CDC will perform typing for healthcare facilities experiencing high numbers of unexplained respiratory illnesses. Testing can be initiated by calling CADE at 800-362-2736. Upon approval, the State Hygienic Laboratory will coordinate specimen collection, test request forms and submission to CDC.

For additional information on recent EV-D68 infections in Illinois and Missouri, visit www.cdc.gov/mmwr/pdf/wk/mm63e0908.pdf .